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Patent Claims

Method for Adjusting or Controlling a Person's Nutrition and/or Consumption

1. Method for adjusting or controlling the nutrition
and/or consumption of carbohydrates and/or fats and/or proteins
in a person subjected to stress,
characterized by the fact
that for the control and/or adjustment of the nutrition and/or
consumption of nutrients in a human being, his/her performance
capacity is determined by determining characteristic
performance capacity parameters and that as a function upon the
determined performance capacity the carbohydrate and/or fat
and/or protein percentage requirements are determined and/or
their consumption by a person, while basing the calculation on
the stress, which is decisive for the nutrition and/or
consumption.

2. Method according to claim 1,
characterized by the fact
that, for determining the performance capacity, the heart rate
and/or blood pressure and/or ergospirometric parameters and/or
lactate concentration in the blood are measured or determined
as a function upon the stress.

FOOTNOTES

3. Method according to claim 1 or 2,
characterized by the fact
that for determining the performance capacity the individual
anaerobic threshold of the person is measured or determined.

5 4. Method according to at least one of the previous
claims,
characterized by the fact
that for determining the performance capacity a scaling of the
performance measured above the individual anaerobic threshold
occurs according to the lactate accumulation rate ΔA .

10 5. Method according to at least one of the previous
claims,
characterized by the fact
that the stress is used as a basis for ¹²the IAT and the lactate
15 accumulation rate ΔA in determining the nutrition and/or the
consumption of a person with regard to his/her carbohydrate
and/or fat and/or protein percentages.

20 6. Method according to at least one of the previous
claims,
characterized by the fact
that the individual anaerobic threshold according to Stegmann
is used a basis for determining the nutrition and/or
consumption of the person with regard to his/her carbohydrate

and/or fat and/or protein percentages.

7. Method according to at least one of the previous claims,

characterized by the fact

that when stress occurs in a person over an extended period of time below his/her individual anaerobic threshold, the fat percentage of the nutrition is adjusted comparatively higher than the carbohydrate and the protein percentages.

8. Method according to at least one of the previous claims,

characterized by the fact

that with a lactate accumulation rate ΔA against ΔA_{\max} the protein percentage of the nutrition is adjusted up to several times as high as with $\Delta A = 0$.

9. Method according to at least one of the previous claims for determining the lactate accumulation rate ΔA , characterized by the following procedural steps

measuring the time-dependent lactate concentration change beyond the individual anaerobic threshold,

adjusting a measurement curve to measurement values gained this way, in which the lactate concentration in relation to time is plotted,

determining a first gradient in the measurement curve at a

time t_{IAT} that corresponds to the individual anaerobic threshold,

determining at least one additional gradient in the measurement curve at a time t_x with $t_x > t_{IAT}$

5 subtracting the second gradient from the first gradient to determine a difference, which represents the lactate accumulation rate ΔA .

10 10. Method according to at least one of the previous claims, characterized by the fact that for determining the performance capacity, different types of stress such as running tests, swimming tests, stepping tests, ergometry methods with graduated or continuous stress increase with and without breaks are used.

15 11. Method for adjusting and/or controlling the nutrition and/or consumption of carbohydrates and/or fats and/or proteins of a person who is subjected to stress characterized by the fact that for the control and/or adjustment of the nutrition and/or consumption of nutrients in a human being his/her performance capacity is determined by determining characteristic performance capacity parameters and that the need for and/or consumption of carbohydrates and/or fats and/or proteins in the

food is determined as a function upon the determined performance capacity of the person, while basing the calculation on the stress-specific substrate mixture ratios that are decisive for the nutrition and/or consumption.

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FOOTNOTES 10

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